CLAIMS

1. A display apparatus, comprising plural cells in which light emission is carried out selectively, wherein the display brightness is determined by the number of times of said light emission and the total number of times of light emission in each cell of the display frame of a screen are varied, characterized in that said apparatus comprises: a sustain frequency judgment part that judges the occurrence frequency of said total number of times of light emission by monitoring the change in said total number of times of light emission; and a control part that controls said total number of times of light emission based on the judgment result of said sustain frequency judgment part.

2. A display apparatus as set forth in claim 1, wherein, said sustain frequency judgment part judges whether a first state, in which said total number of times of light emission is over a fixed first threshold value, occurs more than a fixed first frequency, and whether a second state, in which said total number of times of light emission is under a fixed second threshold value, occurs more than a fixed second frequency.

3. A display apparatus as set forth in claim 2, wherein, said control part decreases said total number of times of light emission when said first state occurs more than said fixed first frequency, and increases said total number of times of light emission when said second state occurs more than said fixed second frequency.

4. A display apparatus as set forth in claim 2, wherein, said sustain frequency judgment part judges that said first frequency is exceeded when said first state lasts more than a fixed sustain period, and that said second frequency is exceeded when said second state lasts more than a fixed suppress period.

5. A display apparatus as set forth in claim 4, wherein, said sustain frequency judgment part detects whether said first state and said second state are

repeated from the cumulative times of said first state and said second state, and varies said fixed sustain period and said fixed suppress period when a repeat is detected.

6. A display apparatus as set forth in claim 4, wherein, by counting the operation time of the display apparatus from the power turn-on, said sustain frequency judgment part varies said fixed sustain period and said fixed suppress according to said operation time.

7. A display apparatus as set forth in claim 2, wherein said sustain frequency judgment part judges that the occurrence frequency exceeds said fixed first frequency when the cumulative time of said first state in a fixed cumulative period is over a fixed first value, and that the occurrence frequency exceeds said fixed second frequency when the cumulative time of said second state in a fixed cumulative period is over a fixed second value.

8. A display apparatus as set forth in claim 7, wherein said sustain frequency judgment part detects whether said first state and said second state are repeated from the cumulative times of said first state and said second state, and varies said first fixed value and said second fixed value when a repeat is detected.

9. A display apparatus as set forth in claim 7, wherein, by counting the operation time of the display apparatus from the power turn-on, said sustain frequency judgment part varies said first fixed value and said second fixed value according to said operation time.

10. A display apparatus as set forth in claim 1, wherein a gradation scale judgment part that judges the occurrence frequency of a fixed gradation scale is further provided, and said control part controls said total number of times of light emission based on the judgment results of said sustain frequency judgment part and said gradation scale judgment part.

11. A display apparatus as set forth in claim 10,

wherein said sustain frequency judgment part judges whether a first state in which said total number of times of light emission is over a fixed first threshold value occurs more than a fixed first frequency, whether a second state in which said total number of times of light emission is under a fixed second threshold value occurs more than a fixed second frequency, and whether a third state in which the gradation scale calculated from the display data is over a third threshold value occurs more than a third frequency, and said control part controls said total number of times of light emission so as to decrease when said first state and said third state occur more than the first frequency and the third frequency, respectively.

12. A display apparatus as set forth in claim 1, wherein a cooling fan is provided, and said cooling fan is controlled based on the judgment results of said sustain frequency judgment part.

13. A display apparatus as set forth in claim 12, wherein said sustain frequency judgment part judges whether a first state in which said total number of times of light emission is over a fixed first threshold value occurs more than a fixed first frequency, and whether a second state in which said total number of times of light emission is under a fixed second threshold value occurs more than a fixed second frequency, and said cooling fan is started or accelerated when said sustain frequency judgment part judges that said first state occurs more than said fixed first frequency, and terminated or decelerated when said sustain frequency judgment part judges that said second state occurs more than said fixed second frequency.

14. A display apparatus, comprising plural cells in which light emission is carried out selectively, wherein the display brightness is determined by the number of times of said light emission and the total number of times of light emission in each cell of the display frame

of a screen are varied, characterized in that a first judgment part that monitors the weighted mean of the display data in each cell of the display frame of a screen and judges the occurrence frequency of said weighted mean, and a control part that controls said total number of times of light emission based on the judgment results of said first judgment part, are provided.

15. A display apparatus as set forth in claim 14, wherein said first judgment part judges whether a first state in which said weighted mean is over a fixed first threshold value occurs more than a fixed first frequency, and whether a second state in which said weighted mean is under a fixed second threshold value occurs more than a fixed second frequency.

16. A display apparatus as set forth in claim 15, wherein said control part decreases said total number of times of light emission when said first state occurs more than said fixed first frequency, and increased said total number of times of light emission when said second state occurs more than said fixed second frequency.

17. A display apparatus as set forth in claim 15, wherein said sustain frequency judgment part judges that the occurrence frequency exceeds said fixed first frequency when said first state lasts continuously more than a fixed sustain period, and that the occurrence frequency exceeds said fixed second frequency when said second state lasts continuously more a fixed suppress period.

18. A display apparatus as set forth in claim 17, wherein said first judgment part detects whether said first state and said second state are repeated from the cumulative times of said first state and said second state, and varies said fixed sustain period and said fixed suppress period when a repeat is detected.

19. A display apparatus as set forth in claim 17, wherein, by counting the operation time of the display

apparatus from the power turn-on, said first judgment part varies said fixed sustain period and said fixed suppress period according to said operation time.

20. A display apparatus as set forth in claim 15, wherein said first judgment part judges that the occurrence frequency exceeds said fixed first frequency when the cumulative time of said first state in a fixed cumulative period is over the first fixed value, and that the occurrence frequency exceeds said fixed second frequency when the cumulative time of said second state in said fixed cumulative period is over the second fixed value.

21. A display apparatus as set forth in claim 20, wherein said first judgment part detects whether said first state and said second state are repeated from the cumulative times of said first state and said second state, and varies said first fixed value and said second fixed value when a repeat is detected.

22. A display apparatus as set forth in claim 20, wherein, by counting the operation time of the display from the power turn-on, said first judgment part varies said first fixed value and said second fixed value according to said operation time.

23. A display apparatus as set forth in claim 14, wherein a gradation scale judgment part that judges the occurrence frequency of a fixed gradation scale is further provided, and said control part controls said total number of times of light emission based on the judgment results of said first judgment part and said gradation scale judgment part.

24. A display apparatus as set forth in claim 23, wherein said first judgment part judges whether a first state in which said weighted mean is over a fixed first threshold value occurs more than a fixed first frequency, whether a second state in which said weighted mean is under a fixed second threshold value occurs more than a fixed second frequency, and whether a third state in

which the gradation scale calculated from the display data is over a third threshold occurs more than a third frequency, and said control part controls said total number of times of light emission so as to decrease when said first state and said third state occur more than the first frequency and the third frequency, respectively.

25. A display apparatus as set forth in claim 14, wherein a cooling fan is provided and said cooling fan is controlled based on the judgment results of said first judgment part.

26. A display apparatus as set forth in claim 25, wherein said first judgment part judges whether a first state in which said weighted mean is over a fixed first threshold value occurs more than a fixed frequency, and whether a second state in which said weighted mean is under a fixed second threshold value occurs more than a fixed second frequency, and said cooling fan is started or accelerated when said first judgment part judges that said first state occurs more than said fixed first frequency, and terminated or decelerated when said first judgment part judges that said second state occurs more than said fixed second frequency.